Evidence-based school management.

Nossa Senhora do Rosário School has invested in a reliable video-monitoring system to understand daily occurrences and support educational decisions.

Organization:
Nossa Senhora do Rosário School

Location:
São Paulo, Brazil

Industry segment:
Education

Application:
Safety and security

Axis partner:
Added

Mission

More than 1,600 students attend Nossa Senhora do Rosário School. In operation since 1943, the institution is one of the most traditional in the city of São Paulo and has a very active community of parents and guardians. To better deal with everyday occurrences, the school felt it needed a high-quality video imaging solution to help respond more assertively to typical day-to-day demands, such as monitoring rooms for the safety of students and staff, searching for lost objects, possible misunderstandings, or any other event that requires analysis of a scene.

Solution

Added, the integrator for the video monitoring project, put together different Axis network cameras offering high-quality images and IP features that make operation easier. The precautions taken in developing the solution were considered from the earliest discussions on the project. The team of experts at Added used AXIS Site Designer to define the best technology for each scenario in order to meet the school's expectations.

The tool also allowed the client to monitor the proposal to be implemented. The solution provides the institution with images of administrative wings, interior and outdoor courtyards, parking areas, access ramps, gates, and even the perimeter of the premises (since the school remains responsible for its students outside its boundaries). These cameras monitor traffic around the institution, as well as student drop-off/pick-up.

Result

The institution has 60 IP cameras that operate 24/7, both for student and teacher safety and for security. In practice, the school is able to analyze situations quickly, and the images offer the quality needed to capture details in any setting and under any lighting conditions—thanks to features such as infrared, WDR and Axis Lightfinder. As the images are compressed using Axis Zipstream technology, the entire system operates without overloading the server, with no visible loss.

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The value of images

The institution already had a video monitoring system. However, when it was faced with an incident that could have been solved just by checking the recordings, the images were not clear enough due to the hardware limitations of the existing cameras. Legal precedent establishes that educational institutions have a duty of surveillance and security. Because of this, schools are liable for harm to students, whether or not there is proof that institution staff were directly involved.

Investing in a reliable video-monitoring system can resolve conflicts such as suspected larceny, which sometimes is shown to be a mere loss of someone's belongings due to carelessness. "Image quality is what drove us to look for new equipment. The school needed a solution that was easy to manage and could retrieve images without complications," says Elias Martins de Souza, IT Manager at Nossa Senhora do Rosário School.

The very nature of the service that educational institutions provide to children and youths requires impartial, reliable, and non-invasive tools. The Child and Adolescent Statute prohibits searches of students and their belongings, such as backpacks, since this is a violation of their personal rights.

The greater good
That's why, after considering proposals involving IP cameras from various manufacturers, the institution sought the expertise of Added, who put together a 100% IP project that would provide a complete solution, offering the availability and reliability the school needed from their monitoring system. Looking for much more than security, the school sought a solution that would promote better management of students' day-to-day lives. The images provide support in situations such as possible misunderstandings, lost objects, and especially for monitoring activities that take place around the perimeter of the institution. For example, it is able to monitor the flow of activity when students come in and leave.

The school realized that the images could be a reliable tool to help resolve certain kinds of incidents.

The system addresses concerns of parents and guardians since anyone could have access to the images if necessary. "Using the high-quality images, we have been able to define the causes of some events with certainty, leaving no room for doubt," Elias Martins de Souza added.

"The system contributes to the safety of students, who are the school's greatest assets. This reliability allows parents and guardians to feel safer because they can rely on watchful eyes from security staff and the cameras. We can guarantee the community that the school is prepared with the very best in image security," the IT specialist said.

Of the system's 25 cameras, 20 offered infrared (IR) capabilities. These were installed in the administrative and secretarial wings, hallways, stairwells, interior courtyards and in the chapel. Cameras without IR were installed in outdoor environments, such as the lunchroom, covered patio, and reception area.

Outside the walls
Educational establishments are also responsible for students outside their premises when they are involved in activities organized by the school, such as field trips or organized/school-guided visits. In addition, schools are also concerned with one particular time period: when students are arriving and leaving.

"The outdoor area was also a concern," says the Nossa Senhora do Rosario IT Manager. "Along the perimeter, students remain under the custody of the school. So now we can see vehicles and children in transit, which enhances student and parent safety as much as possible."

To accomplish this, the school chose to install 14 IP cameras along the perimeter. "We use the Corridor Format not only in the hallways indoors but also with the cameras that monitor the external perimeter. Using this 9:16 format on the outdoor cameras allowed us to gain depth and eliminate the edges of the images that are not significant for the school," Rodolfo Medeiros, the Infrastructure Designer who was responsible for the project, explained.

Final test

Another key point is the processing demands of the cameras. Axis Zipstream technology preserves all important forensic details while reducing bandwidth and storage requirements by an average of 50% or more. "The use of Zipstream is very important because the client bought a server for processing the images. With this, we achieved good optimization in the use of their storage," Rodolfo Medeiros explained. In addition, the school uses WDR technology on all cameras.

The Axis solution also contributed to optimizing the use of the server where the VMS system is installed. The fact that Axis cameras have high processing capacity onboard the hardware itself considerably reduced the need for server processing power compared to the previous solution. In other words, the total cost of ownership using the Axis solution generated savings and made it possible to expand the school's number of cameras while still using the existing server and storage.

Nossa Senhora do Rosário School is, therefore, already thinking about expanding the system. "Parents require this, for the school to be able to provide analysis and accurate, fast, qualified information. We have achieved this and we are thinking about expanding the use of IP cameras," Elias Martins de Souza said. "In this next stage, we will triple the number of devices."

About Axis Communications

Axis enables a smarter and safer world by creating network solutions that provide insights for improving security and new ways of doing business. As the industry leader in network video, Axis offers products and services for video surveillance and analytics, access control, and audio systems. Axis has more than 3,000 dedicated employees in over 50 countries and collaborates with partners worldwide to deliver customer solutions. Axis was founded in 1984 and has its headquarters in Lund, Sweden.

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